

What Is Claimed Is:

1. A method for enhancing performance of a project, comprising the steps of:

inputting project information, including a desired performance level; and

selecting enhancement solutions based on the project information.

5 2. The method of claim 1, wherein the project information comprises building plans for a structure.

3. The method of claim 2, wherein the project information comprises information on the uses of rooms within the structure.

10 4. The method of claim 2, wherein the project information comprises information on interior structural elements.

5. The method of claim 1, wherein project information comprises information on areas within a structure, and wherein the desired performance level is a performance of noise reduction between the areas.

6. The method of claim 1, wherein the enhancement solutions are selected from a plurality of enhancement solutions stored in a sound control center.

7. The method of claim 6, wherein each enhancement solution is combinable with another enhancement solution to form a combination of enhancement solutions.

8. The method of claim 7, wherein a system performance rating is associated with each combination of enhancement solutions, and wherein each system performance rating is stored in the sound control center.

9. The method of claim 8, wherein each system performance rating is a field sound transmission class rating.

10. The method of claim 8, wherein the step of selecting further comprises the step of choosing a combination of enhancement solutions with a system performance rating equal to or greater than the desired performance level.

11. The method of claim 10, wherein a cost is associated with each combination of enhancement solutions and wherein the combination of enhancement solutions is also chosen based on cost.

12. The method of claim 2, wherein the step of selecting further comprises the step of reviewing the project information to determine improvement areas.

13. The method of claim 12, wherein the enhancement solutions are selected based upon the determined improvement areas.

14. The method of claim 13, wherein the determined improvement areas include acoustical weak links.

15. The method of claim 14, wherein the weak links include penetrating items, construction discontinuities, sound transmission through structural components, and cross-talk through ducts.

16. The method of claim 13, wherein at least one of the enhancement solutions involves the addition of a sound control component.

17. The method of claim 16, wherein the sound control component is a sound control material installed in a wall, floor, or ceiling assembly.

5 18. The method of claim 16, wherein the sound control component is a material for sealing wall, floor, and ceiling perimeters.

19. The method of claim 16, wherein the sound control component is an acoustically enhanced door.

10 20. The method of claim 13, where at least one of the enhancement solutions involves the indirect positioning of interior components.

21. The method of claim 20, wherein the interior components comprise electrical outlets, air ducts, and fluid-filled pipes.

22. The method of claim 13, wherein at least one of the enhancement solutions involves the discontinuous construction of structural elements of the project.

23. The method of claim 22, wherein the at least one enhancement solution comprises the staggering of wall studs.

24. The method of claim 22, wherein the at least one enhancement solution comprises the addition of a cut line in a floor or floor elements.

25. The method of claim 1, further comprising the step of modifying the inputted project information to incorporate the enhancement solutions.

26. The method of claim 25, wherein the modified inputted information describes a project operating at the desired performance level.

27. The method of claim 25, further comprising the step of presenting the modified project information to a user.

28. The method of claim 27, wherein the modified project information is transferred from the sound control center to a remote computer.

29. The method of claim 25, wherein the modified project information includes a bill of materials.

5 30. The method of claim 29, wherein the bill of materials includes cost information.

31. The method of claim 30, wherein the modified project information includes of a list of tasks based on the selected enhancement solutions.

~~32.~~ A system for enhancing performance of a project, the system comprising:

10 a central computer for receiving project information;

a control center containing a plurality of enhancement solutions; and

a reviewer for determining a combination of enhancement solutions based on the received project information.

33. The system of claim 32, wherein each enhancement solution is combinable with at least one other enhancement solution to form a combination of enhancement solutions.

5 34. The system of claim 32, wherein the central computer is located in a design department.

35. The system of claim 34, wherein the design department is located in the control center.

10 36. The system of claim 34, wherein the design department is located in a main facility.

37. The system of claim 32, wherein the reviewer is located in the control center.

38. The system of claim 37, wherein the reviewer is a human team of acoustical designers.

39. The system of claim 37, wherein the reviewer is a reviewing computer.

40. The system of claim 32, wherein the project information is transmitted to the central computer through a network from a user computer.

41. The system of claim 32, wherein the project information comprises building plans for a residential structure.

42. The system of claim 41, wherein the building plans comprise information on interior structural elements.

43. The system of claim 41, wherein the project information comprises information on the uses of rooms with the residential structure.

44. The system of claim 32, wherein the project information comprises a desired performance level.

45. The system of claim 33, wherein a system performance rating is associated with each combination of enhancement solutions.

5 46. The system of claim 45, wherein an acoustical laboratory located in the main facility determines each system performance rating.

47. The system of claim 45, wherein each system performance rating is a field sound transmission class rating.

10 48. The system of claim 45, wherein the review determines a combination of enhancement solutions based on its associated system performance rating.

49. The system of claim 32, wherein at least one of the plurality of enhancement solutions comprises material information.

50. The system of claim 49, wherein material information comprises information on a sound absorbing material.

51. The system of claim 49, wherein material information comprises information on a sound blocking material.

52. The system of claim 32, wherein at least one of the plurality of enhancement options comprises structural relocation information.

53. The system of claim 52, wherein structural relocation information contains information on indirectly positioning interior components.

54. The system of claim 33, wherein each of the combination of enhancement solutions comprises cost information.

55. The system of claim 54, wherein the reviewer determines a combination of enhancement solutions based on cost information.

56. The system of claim 32, further comprising partner computers, wherein each partner computer is remotely located from the sound control center and transmits updated material and cost information to the sound control center.

5 57. The system of claim 32, wherein the project information is modified to incorporate the determined enhancement solutions.

58. The system of claim 40, wherein the modified project information is presented at a user computer.

59. The system of claim 58, wherein the modified project information includes a bill of materials and component installation instructions.

10 60. The method of claim 8, wherein each system performance rating is verified by experimentation.

61. The method of claim 11, wherein each cost includes information related to materials cost and labor cost.

62. The method of claim 14, wherein the weak links include components having component performance ratings less than the desired performance level.

63. The method of claim 5, wherein the desired performance level is a field system sound transmission rating.